

CLAIMS

1. A communications headset comprising:
an earbud with a speaker to be disposed near the ear of a headset user;

a microphone;

an electrical connector designed to couple with a communications device;

an electrical cord with a first end coupled to the earbud and a second end coupled to the electrical connector; and

a spring cord with a first end coupled to the earbud and a second end coupled to the microphone, wherein the microphone is capable of bi-directional movement with associated extension and retraction of the spring cord.
2. The communications headset of claim 1, wherein the electrical cord is disposed within the coils of the spring cord.
3. The communications headset of claim 2, wherein the bi-directional movement of the microphone is along an axis defined by the electrical cord.
4. The communications headset of claim 2, wherein the microphone is positioned by gravity away from the earbud by extending the spring.
5. The communications headset of claim 2, wherein the microphone is positioned by a user away from the earbud by extending the spring cord, and wherein the microphone is automatically returned towards the earbud upon release by the user for hands free operation or headset storage.
6. The communications headset of claim 1, further comprising a cord retractor along the electrical cord between the earbud and electrical connector for retracting the electrical cord.

7. The communications headset of claim 6, wherein the cord retractor is an uptake cord storage reel.
8. The communications headset of claim 1, wherein the microphone comprises a housing with an eyelet for coupling with the electrical cord.
9. A communications headset comprising:
 - an earbud with a speaker to be disposed near the ear of a headset user;
 - a microphone;
 - an electrical connector designed to couple with a communications device;
 - an electrical cord with a first end coupled to the earbud and a second end coupled to the electrical connector; and
 - a spring cord with a first end coupled to the earbud and a second end coupled to the microphone, wherein the electrical cord is disposed within the coils of the spring cord and the relative position of the microphone along the electrical cord defines a plurality of microphone positions comprising:
 - a storage position associated with the spring cord in a retracted status;
 - a first use position for hands free operation whereby the spring cord is in a first extended position due to the weight of the microphone; and
 - a second use position for improved signal to noise ratio whereby the spring cord is in a second extended position due to user applied force.
10. The communications headset of claim 9, further comprising a cord retractor disposed between the connector and earbud, wherein the cord retractor winds the electrical cord between the connector and earbud when the microphone is in the storage position.

11. The communications headset of claim 10, wherein the cord retractor is an uptake cord storage reel.
12. The communications headset of claim 9, wherein a spring cord retraction force automatically returns the microphone from the second use position to the first use position upon termination of the user applied force.
13. The communications headset of claim 9, wherein the distance of electrical cord between the corresponding microphone position and earbud is 9-11 centimeters in the first use position.
14. The communications headset of claim 9, wherein the distance of electrical cord between the corresponding microphone position and earbud is 19-21 centimeters in the second use position.
15. The communications headset of claim 9, wherein the microphone comprises a housing with an eyelet for coupling with the electrical cord.
16. A communications headset comprising:
 - a speaker means for outputting receive voice signals from a far end user;
 - a microphone means for detecting transmit voice signals from a headset user;
 - a connector means for coupling the headset to a communications device;
 - a cord means with a first end coupled to the speaker means and a second end coupled to the connector means; and
 - a spring means with a first end coupled to the speaker means and a second end coupled to the microphone means, wherein the microphone is capable of bi-directional movement with associated extension and retraction of the spring means.
17. The communications headset of claim 16, further comprising a retractor means disposed between the speaker means and connector means for storing the cord means.

18. A method for improving signal to noise ratio in a communications headset comprising:

providing an earbud, a microphone, a connector, an electrical cord with a first end coupled to the earbud and a second end coupled to the electrical connector, and a spring cord with a first end coupled to the earbud and a second end coupled to the microphone, wherein the electrical cord is disposed in the spring cord;

positioning the microphone along the electrical cord away from the earbud with a user applied force, wherein signal to noise ratio is improved; and

automatically retracting the microphone along the electrical cord towards the earbud upon termination of the user applied force, wherein the spring cord provides the retraction force to position the microphone for hands free operation.